

Central Intelligence Agency



Washington, D.C. 20505

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## DIRECTOR OF INTELLIGENCE

MEMORANDUM FOR: See Distribution List

FROM:

[Redacted]

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Director of Global Issues

SUBJECT:

Jamaica: Marijuana Estimate, Spring 1985

[Redacted]

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1. The attached memorandum presents our estimate of marijuana production in Jamaica in the spring 1985. The estimate was prepared from an aerial survey of Jamaica in late April and early May. The estimate confirms a significant reduction in marijuana cultivation from the fall of 1984 to spring 1985. [Redacted]

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2. This memorandum was prepared by analysts from the Strategic Narcotics/Western Hemisphere Branch and the DDI Analytic Support Group. [Redacted]

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3. Questions and comments are welcome and may be addressed to the Chief, Terrorism/Narcotics Analysis Division, OGI, [Redacted]

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[Redacted]

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[Redacted]

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## Attachment:

Jamaica: Marijuana Production,  
Spring 1985 [Redacted] GI M 85-10211,  
July 1985 [Redacted]

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[Redacted]

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[Redacted]

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SUBJECT: Jamaica: Marijuana Production, Spring 1985

OGI/TNAD/NAR/[REDACTED] (26 July 1985)

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Washington, D.C. 20505

DIRECTOR OF INTELLIGENCE

24 July 1985

JAMAICA: Marijuana Production, Spring 1985Summary

The Jamaican Government is making progress in its efforts to reduce marijuana production. An aerial survey conducted in April by the Jamaica Defense Force of the island's marijuana crop revealed an estimated 400 hectares under cultivation, notably less than the 1,900 hectares estimated during a similar survey in the fall of 1984. We estimate Jamaican marijuana production in 1985 will be no more than 1,250 to 1,450 metric tons, well below the 2,000 to 3,000 metric tons estimated for 1984. Much of the decline is probably the result of improved eradication by Jamaican security forces who, with US support, destroyed more marijuana during the first five months of this year than in all of 1984. [REDACTED]

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This memorandum was prepared by [REDACTED]  
[REDACTED] the Strategic Narcotics Branch, Office of Global  
Issues and by [REDACTED] the Analytic Support Group.  
Comments and queries should be addressed to Chief,  
Terrorism/Narcotics Analysis Division, [REDACTED]

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Jamaica: Marijuana Production, Spring 1985Introduction

Jamaica is one of the three major foreign suppliers of marijuana to the United States. In late 1984, however, the Government increased enforcement pressure on the marijuana trade. New legislation gave the Government broad powers to control air traffic, and special tax measures directed against drug traffickers were introduced. The Government stepped up eradication efforts to halt the spread of marijuana cultivation. Our 1985 spring marijuana survey indicates Jamaica's marijuana eradication program may be succeeding, and US supported antinarcotics programs may be yielding significant results. The marijuana industry is deeply entrenched in Jamaican society, however, and a strained economy and rugged terrain will continue to complicate enforcement and eradication efforts. [REDACTED]

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The Aerial Survey

Our current estimate of Jamaican marijuana production is based on an aerial survey of the spring marijuana crop conducted between 25 April and 2 May by the Jamaica Defense Force (JDF) with the assistance of US experts. The survey covered approximately 2,700 square kilometers or about 30 percent of the island west of Kingston. Marijuana is not known to be grown commercially to the east and a helicopter flight around the Blue Mountains by survey personnel revealed no marijuana cultivation. The imagery obtained from the aerial survey was more than 85 percent cloud-free and of adequate quality to make a reliable estimate. [REDACTED]

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The aerial survey was backed by extensive ground-truth. Eight helicopter missions were flown to verify the aerial photography and to provide close-up inspection of marijuana cultivation and eradication techniques. The absence of large fields and the almost total disappearance of seedbeds in the Negril and Braes River wetlands was in striking contrast to observations during a similar aerial survey in the fall of 1984. Numerous furrows, lush with young seedlings last year, were overgrown this spring. In addition, members of the spring team who participated in the fall 1984 survey reported major reductions in the amount of land devoted to marijuana cultivation in the interior highlands. [REDACTED]

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Marijuana Cultivation and the Spring Estimate

Imagery from the recent aerial survey shows that the spring marijuana crop, like the fall crop, is grown predominately in the interior hills and mountains of Jamaica. Most marijuana cultivation is located on public land in the mountainous regions of St. Ann, St. Catherine, and Clarendon Parishes. Smaller concentrations were observed in the hills of St. James,

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St. Elizabeth, Hanover, and Westmoreland Parishes as well as in the Negril and Braes River wetlands. (See map.) In almost all cases the plots of marijuana were small, averaging two-tenths of a hectare. Observers saw only a few fields larger than one hectare.

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The estimated area under cultivation in Jamaica in the spring of 1985 is between 280 and 540 hectares, with a midpoint of 410 hectares.

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the average yield is between 540 and 770 kilograms per hectare per harvest. These figures indicate the spring crop of marijuana will be between 220 and 320 metric tons. If the cultivated area for the fall 1985 crop approaches the 1,900 hectares estimated for fall 1984, total production in 1985 will be between 1,250 and 1,450 metric tons, far less than the 2,000 to 3,000 metric tons we estimated last year. If Jamaican eradication efforts continue at their present pace through the summer and fall, the total crop harvested in 1985 will be even less. Our estimate of total annual marijuana production in Jamaica still contains some uncertainties

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Despite these uncertainties, the April survey results point to a spring 1985 marijuana harvest that will be substantially below that of fall 1984 harvest. We judge that a combination of factors probably account for this:

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- o The spring crop may always be smaller than the fall one, making our 1984 assumption that the crops are about equal incorrect.
- o Government eradication efforts over the past several months have reduced overall marijuana cultivation.
- o Intensified enforcement efforts may have caused some Jamaican growers to skip or delay the spring planting.
- o A marijuana surplus in the US market may have caused growers to cut back.

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#### Signs of Progress in Drug Control

The Jamaican Government of Prime Minister Seaga has made substantial progress in drug control this year. Seaga told US officials at a recent meeting that his objective was the total elimination of the island's marijuana export crop by the end of summer 1985. Early in 1985, Seaga ordered Jamaican security forces to intensify their destruction of marijuana fields by increasing the eradication workforce from 18 men to 100.

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By late May,

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[redacted]

security forces had destroyed over 600 hectares of marijuana, more than in all of 1984. Eradication operations were particularly effective in the marshlands of western Jamaica, where the flat terrain is conducive to extensive cultivation as well as more efficient eradication. [redacted]

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[redacted]

This year Seaga has taken important steps to curb smuggling by general aviation aircraft. In late February, he shifted responsibility for security at Jamaica's four major domestic airfields from the Civil Aviation Department to the JDF in an attempt to control smuggling. In addition to improving control at the domestic airfields, the JDF destroyed several clandestine airstrips traffickers had used. Of some 40 illegal airfields identified as major outlets for marijuana traffickers, JDF engineer units had demolished 29 by the middle of June [redacted]

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[redacted] According to US Embassy sources, the JDF effort was highly motivated and effective.

[redacted]

#### Obstacles to Further Progress

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Despite considerable strides in drug enforcement, significant problems remain and the present decline in production may be only temporary. Major Jamaican drug producers and brokers probably have the resources to skip an entire season while they wait to see if current enforcement pressure can be maintained. [redacted]

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[redacted]

Traffickers also are able to respond quickly to enforcement initiatives, and experience has shown that smugglers can repair damaged airstrips easily, and maritime and commercial air cargo routes can be exploited more fully. [redacted]

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Jamaican resources are stretched thin, and continued pressure on traffickers will require sustained US aid. US Embassy officials have warned that Jamaican funds for the eradication program are already running low. For example, the JDF Coast Guard lacks the spare parts and fuel to keep its patrol boats operating at full capacity, and it is not prepared to counter the surge in maritime drug trafficking expected as air routes are squeezed. Moreover, the loss in early June of a JDF Air Wing helicopter in a narcotics raid was a serious blow to enforcement capabilities and left only one helicopter operational. [REDACTED]

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**Fall 1984 and Spring 1985 Jamaican Marijuana Crop<sup>a</sup>**

Stratum <sup>b</sup>	Fall 1984			Spring 1985		
	Estimated Number of Fields	Estimated <sup>c</sup> Area Under Cult. (ha)	Estimated <sup>d</sup> Production (met. tons)	Estimated Number of Fields	Estimated <sup>c</sup> Area Under Cult. (ha)	Estimated <sup>d</sup> Production (met. tons)
High	6,550	1,300	750-1,000	815	170	90-130
Low	2,150	430	250-350	1,125	235	125-180
Marsh	700	140	75-125	30	5	3-5
Approx. Total	9,400	1,900	1,000-1,500	1,970	410	220-315

<sup>a</sup> Totals may not add because of rounding.

<sup>b</sup> The three strata are: (1) The mountainous region with a high concentration of fields; (2) the mountainous region with a lower concentration of fields; and (3) the wetland or marsh area.

<sup>c</sup> The estimated number of fields times the average field size of 0.2 hectares gives the estimated area under cultivation. Average field size was calculated from measurements taken from the aerial photography.

<sup>d</sup> Multiplying the area under cultivation by the average yield of 450 to 770 kg/ha provides a production estimate for a single crop.

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**The Estimating Procedure**

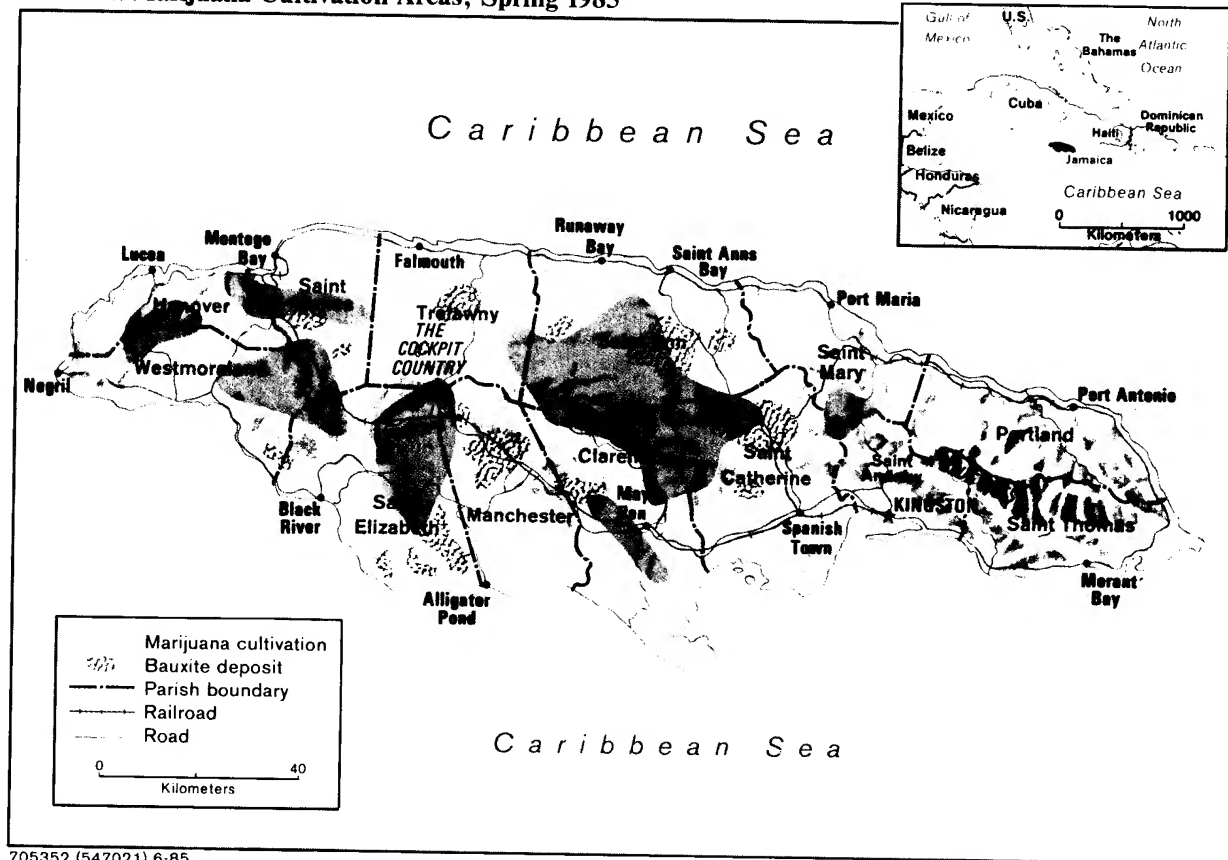
Our spring 1985 estimate of Jamaican marijuana production is a statistical analysis of data derived from aerial imagery and is based on the assumption that the total harvest is equal to the area under cultivation multiplied by the average yield. The fields observed on the imagery are counted and their average size in hectares is determined. The number of hectares in the photographed area is estimated by multiplying the number of fields observed by their average size. The total area devoted to marijuana production is then extrapolated statistically from the area surveyed. For statistical purposes, the marijuana growing regions were divided into three categories: the wetlands near Negril and the Braes River; the interior highlands with a high concentration of fields; and the mountainous areas with a lower concentration of fields.

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# Jamaica: Marijuana Cultivation Areas, Spring 1985



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